

FIG. 1A

1 CCTAGAGCCAGCAGAGTCCAGGCTGCTGTTAACAACCTTCATGTCCCCGTGGGTAGCAGGC 60
61 AGGTGCTTCTGTCTGATCTGGCTCTCCTTGACCACTGTACTCATCAAATAGACCAAGATC 120
121 CCCAGAGTCCAAGATCCTTACAAGGGGGCCAGAAAGGGATGAGCTTTCTGAAGAAGCACT 180
181 GATGTAAAATACCAGGAATTTTGACATCGAAGAAGATTTTGTGATGGCAGCTGGGATTT 240
241 GGCCATAATCTAGAAGACACATGGTGAATACAGTTGCAAGTCATTTAGTCATATTTCTTG 300
301 CTAAATTGCTGTGTCTTCAATGGCTGAATTGAAGATCCCTCTTACCCGCCAGGTGCCAAG 360
361 AACTATGAACAGGCAGGGCAATAGAAAGACAACCTAAAGAAGGATCCAACGATTTGAAATT 420
421 CCAGAACTTCAGTCTGCCAAAAACAGGTCATGGCCTCGCATCAATAGTGCCACAGGCCA 480
481 GTACCAGAGGATGAACAAGCCTCTTCTAGACTGGGAAAGAACTTTGCTGCAGTCCTGGA 540
541 TGGAGCAAAGGCCACAGTGATGATGACTATGATGACCTGAGCTTCGGATGGAAGAGAC 600
601 ATGGCAGTCGATTAAAATTTTACCAGCCCGGCCTATAAAGGAATCTGAATATGCAGATAC 660
661 AACTATTTCAAGGTTGCAATGGACACTCCCCTTCCGTTAGACACCAGGACCTCTATCTC 720
721 CATTTGGACAGCCGACCTGGAACACACAGACGAGGTTGGAAAGAGTGGACAAACCCATTT 780
781 CAAGGACGTCAGAAGCCAAAACATTAAAGGAGATGCATCCGTAAGAAAGAACAAGATTCC 840
841 TTTACCACCTCCTCGGCCTCTCATAACACTTCCGAAGAAGTACCAACCCTTGCCCCCTGA 900
901 GCCGGAGAGCAGCAGGCCACCTTTATCTCAGAGACACACCTTTCCAGAAGTCCAGAGAAT 960
961 GCCCAGTCAGATAAGCTTAAGGGACTTAAGTGAGGTCTTGAAGCAGAAAAAGTTCCTCA 1020
1021 TAACCAGAGGAAGCCTGAATCAACTCATCTGTTAGAAAACCAAATACTCAAGAGATTCC 1080
1081 ACTTGCCATTAGCAGTTCTTCATTACGACAAGCAACCACAGTGTGCAAAACAGAGATCA 1140
1141 TAGAGGAGGCATGCAGCCCTGTTCTCCTCAGAGATGCCAGCCTCCAGCCAGCTGCAGCCC 1200
1201 TCACGAAAATATACTGCCCTATAAATACACAAGCTGGAGACCACCTTTCCCCAAAAGGTC 1260
1261 TGATAGAAAGGATGTCCAGCACAATGAATGGTACATTGGAGAATACAGCCGCCAGGCAGT 1320
1321 GGAAGAGGCATTTCATGAAGGAGAACAAGGATGGTAGTTTCTTGGTCCGAGATTGTTCCAC 1380
1381 AAAATCCAAGGAAGAGCCCTATGTTTTGGCTGTGTTTTATGAGAAACAAAGTCTACAATGT 1440
1441 AAAAATCCGCTTCCTGGAGAGGAATCAGCAGTTTGCCCTGGGGACAGGACTCAGAGGAGA 1500

09966955 "092801

FIG. 1B

1501 TGAGAAGTTTGATTGAGTAGAAGACATCATCGAACACTACAAGAATTTCCCATTATACT 1560
1561 AATTGATGGGAAAGATAAACTGGGGTCCACAGGAAACAGTGTCACCTCACTCAGCCACT 1620
1621 CCCTCTCACCAGACACCTCTTGCCTCTGTAGCCTGGTCTTTGTGTTATCTTTGGTTTACT 1680
1681 GGATTCAGCGCTTCCATTGTTTTTCATTGATTTCAAAAGTTTATTTTCTGTGCCTTCAAGG 1740
1741 GACAACTTTTTTAACCTTTGGAGAAAAGAAAAACACTCTATAACAGAGAGTGGAATCAC 1800
1801 TCACGGTTTTGAAAGTTCAAACACAGAGAAAATATTTATAACATGCAAAA 1851

090655-0201
10220" 555555

Economic Indicators		Social Indicators		Environmental Indicators		Health Indicators		Education Indicators		Infrastructure Indicators	
Indicator	Value	Indicator	Value	Indicator	Value	Indicator	Value	Indicator	Value	Indicator	Value
GDP (USD)	1200000000000	Population (Millions)	100	Air Quality Index	75	Life Expectancy (Years)	75	Enrollment Rate (%)	95	Road Network (km)	10000
Unemployment Rate (%)	5.5	Urbanization Rate (%)	60	Water Quality Index	80	Infant Mortality Rate (per 1000)	10	Graduation Rate (%)	90	Power Generation (MW)	5000
Inflation Rate (%)	2.0	Rural Population (%)	40	Forest Cover (%)	30	Maternal Mortality Rate (per 1000)	5	Research and Development (%)	1.5	Internet Usage (%)	80
Interest Rate (%)	4.0	Population Growth Rate (%)	1.0	Waste Recycling Rate (%)	15	Child Mortality Rate (per 1000)	20	Patent Applications (per 1000)	0.5	Mobile Phone Usage (%)	90
Exchange Rate (USD/Local)	1.0	Gender Equality Index	70	Renewable Energy Share (%)	10	Adult Literacy Rate (%)	95	High School Completion Rate (%)	85	Public Transport Usage (%)	70
Trade Balance (USD)	50000000000	Human Development Index	0.75	Carbon Footprint (kg/capita)	1500	Primary School Enrollment Rate (%)	98	University Enrollment Rate (%)	75	Healthcare Expenditure (%)	5.0
Foreign Direct Investment (USD)	20000000000	Gender Gap Index	65	Energy Consumption (kWh/capita)	2000	Secondary School Enrollment Rate (%)	95	Research and Development Expenditure (%)	2.0	Healthcare Quality Index	85
Government Expenditure (%)	15.0	World Economic Forum Index	70	Water Consumption (liters/capita)	150	Tertiary School Enrollment Rate (%)	80	Infrastructure Investment (%)	10.0	Healthcare Access Index	90
Public Debt (USD)	300000000000	Global Competitiveness Index	75	Waste Generation (kg/capita)	1.0	University Graduation Rate (%)	85	Infrastructure Quality Index	80	Healthcare Efficiency Index	85
Central Bank Assets (USD)	100000000000	World Economic Outlook Index	70	Waste Recycling Cost (USD/ton)	50	Postgraduate Enrollment Rate (%)	60	Infrastructure Development Index	75	Healthcare Innovation Index	80
Central Bank Reserves (USD)	50000000000	World Economic Forum Index	70	Waste Recycling Revenue (USD/ton)	10	PhD Completion Rate (%)	50	Infrastructure Modernization Index	70	Healthcare Digitalization Index	75
Central Bank Liquidity (USD)	20000000000	World Economic Forum Index	70	Waste Recycling Policy Index	80	Postgraduate Graduation Rate (%)	40	Infrastructure Sustainability Index	65	Healthcare Digitalization Policy Index	70
Central Bank Capital (USD)	10000000000	World Economic Forum Index	70	Waste Recycling Legislation Index	75	Postgraduate Research Output (%)	30	Infrastructure Resilience Index	60	Healthcare Digitalization Legislation Index	65
Central Bank Assets (USD)	100000000000	World Economic Forum Index	70	Waste Recycling Enforcement Index	70	Postgraduate Research Funding (%)	20	Infrastructure Security Index	55	Healthcare Digitalization Enforcement Index	60
Central Bank Reserves (USD)	50000000000	World Economic Forum Index	70	Waste Recycling Monitoring Index	65	Postgraduate Research Grants (%)	15	Infrastructure Safety Index	50	Healthcare Digitalization Monitoring Index	55
Central Bank Liquidity (USD)	20000000000	World Economic Forum Index	70	Waste Recycling Reporting Index	60	Postgraduate Research Publications (%)	10	Infrastructure Security Measures (%)	45	Healthcare Digitalization Reporting Index	50
Central Bank Capital (USD)	10000000000	World Economic Forum Index	70	Waste Recycling Transparency Index	55	Postgraduate Research Citations (%)	5	Infrastructure Security Training (%)	40	Healthcare Digitalization Transparency Index	45
Central Bank Assets (USD)	100000000000	World Economic Forum Index	70	Waste Recycling Accountability Index	50	Postgraduate Research Impact (%)	5	Infrastructure Security Audits (%)	35	Healthcare Digitalization Accountability Index	40
Central Bank Reserves (USD)	50000000000	World Economic Forum Index	70	Waste Recycling Compliance Index	45	Postgraduate Research Innovation (%)	5	Infrastructure Security Assessments (%)	30	Healthcare Digitalization Compliance Index	35
Central Bank Liquidity (USD)	20000000000	World Economic Forum Index	70	Waste Recycling Enforcement Index	40	Postgraduate Research Creativity (%)	5	Infrastructure Security Reviews (%)	25	Healthcare Digitalization Enforcement Index	30
Central Bank Capital (USD)	10000000000	World Economic Forum Index	70	Waste Recycling Monitoring Index	35	Postgraduate Research Collaboration (%)	5	Infrastructure Security Evaluations (%)	20	Healthcare Digitalization Monitoring Index	25
Central Bank Assets (USD)	100000000000	World Economic Forum Index	70	Waste Recycling Reporting Index	30	Postgraduate Research Partnerships (%)	5	Infrastructure Security Inspections (%)	15	Healthcare Digitalization Reporting Index	20
Central Bank Reserves (USD)	50000000000	World Economic Forum Index	70	Waste Recycling Transparency Index	25	Postgraduate Research Networks (%)	5	Infrastructure Security Certifications (%)	10	Healthcare Digitalization Transparency Index	15
Central Bank Liquidity (USD)	20000000000	World Economic Forum Index	70	Waste Recycling Accountability Index	20	Postgraduate Research Conferences (%)	5	Infrastructure Security Standards (%)	5	Healthcare Digitalization Accountability Index	10
Central Bank Capital (USD)	10000000000	World Economic Forum Index	70	Waste Recycling Compliance Index	15	Postgraduate Research Workshops (%)	5	Infrastructure Security Guidelines (%)	5	Healthcare Digitalization Compliance Index	5
Central Bank Assets (USD)	100000000000	World Economic Forum Index	70	Waste Recycling Enforcement Index	10	Postgraduate Research Seminars (%)	5	Infrastructure Security Policies (%)	5	Healthcare Digitalization Enforcement Index	5
Central Bank Reserves (USD)	50000000000	World Economic Forum Index	70	Waste Recycling Monitoring Index	5	Postgraduate Research Forums (%)	5	Infrastructure Security Frameworks (%)	5	Healthcare Digitalization Monitoring Index	5
Central Bank Liquidity (USD)	20000000000	World Economic Forum Index	70	Waste Recycling Reporting Index	5	Postgraduate Research Roundtables (%)	5	Infrastructure Security Procedures (%)	5	Healthcare Digitalization Reporting Index	5
Central Bank Capital (USD)	10000000000	World Economic Forum Index	70	Waste Recycling Transparency Index	5	Postgraduate Research Panels (%)	5	Infrastructure Security Protocols (%)	5	Healthcare Digitalization Transparency Index	5
Central Bank Assets (USD)	100000000000	World Economic Forum Index	70	Waste Recycling Accountability Index	5	Postgraduate Research Debates (%)	5	Infrastructure Security Measures (%)	5	Healthcare Digitalization Accountability Index	5
Central Bank Reserves (USD)	50000000000	World Economic Forum Index	70								

1	M A E L K I P L T R Q V P R																		14		
15	T	M	N	R	Q	G	N	R	K	T	T	K	E	G	S	N	D	L	K	F	34
35	Q	N	F	S	L	P	K	N	R	S	W	P	R	I	N	S	A	T	G	Q	54
55	Y	Q	R	M	N	K	P	L	L	D	W	E	R	N	F	A	A	V	L	D	74
75	G	A	K	G	H	S	D	D	D	Y	D	D	P	E	L	R	M	E	E	T	94
95	W	Q	S	I	K	I	L	P	A	R	P	I	K	E	S	E	Y	A	D	T	114
115	H	Y	F	K	V	A	M	D	T	P	L	P	L	D	T	R	T	S	I	S	134
135	I	G	Q	P	T	W	N	T	Q	T	R	L	E	R	V	D	K	P	I	S	154
155	K	D	V	R	S	Q	N	I	K	G	D	A	S	V	R	K	N	K	I	P	174
175	L	P	P	P	R	P	L	I	T	L	P	K	K	Y	Q	P	L	P	P	E	194
195	P	E	S	S	R	P	P	L	S	Q	R	H	T	F	P	E	V	Q	R	M	214
215	P	S	Q	I	S	L	R	D	L	S	E	V	L	E	A	E	K	V	P	H	234
235	N	Q	R	K	P	E	S	T	H	L	L	E	N	Q	N	T	Q	E	I	P	254
255	L	A	I	S	S	S	S	F	T	T	S	N	H	S	V	Q	N	R	D	H	274
275	R	G	G	M	Q	P	C	S	P	Q	R	C	Q	P	P	A	S	C	S	P	294
295	H	E	N	I	L	P	Y	K	Y	T	S	W	R	P	P	F	F	K	R	S	314
315	D	R	K	D	V	Q	H	N	E	W	Y	I	G	E	Y	S	R	Q	A	V	334
335	E	E	A	F	M	K	E	N	K	D	G	S	F	L	V	R	D	C	S	T	354
355	K	S	K	E	E	P	Y	V	L	A	V	F	Y	E	N	K	V	Y	N	V	374
375	K	I	R	F	L	E	R	N	Q	Q	F	A	L	G	T	G	L	R	G	D	394
395	E	K	F	D	S	V	E	D	I	I	E	H	Y	K	N	F	P	I	I	L	414
415	I	D	G	K	D	K	T	G	V	H	R	K	Q	C	H	L	T	Q	P	L	434
435	P	L	T	R	H	L	L	P	L												443

FIG. 3A

1	CCTAGAGCCAGCAGAGTCCAGGCTGCTGTTAACAACCTTCATGTCCCCGTGGGTAGCAGGC	60
61	AGGTGCTTCTGTCTGATCTGGCTCTCCTTGACCACTGTACTCATCAAATAGACCAAGATC	120
121	CCCAGAGTCCAAGATCCTTACAAGGGGGCCAGAAAGGGATGAGCTTTCTGAAGAAGCACT	180
181	GATGTAAAATACCAGGAATTTTGACATCGAAGAAGATTTTTGTGATGGCAGCTGGGATTT	240
241	GGCCATAATCTAGAAGACACATGGTGAATACAGTTGCAAGTCATTTAGTCATATTTCTTG	300
301	CTAAATTGCTGTGTCTTCAATGGCTGAATTGAAGATCCCTCTTACCCGCCAGGTGCCAAG	360
1	M A E L K I P L T R Q V P R	14
361	AACTATGAACAGGCAGGGCAATAGAAAGACAACCTAAAGAAGGATCCAACGATTTGAAATT	420
15	T M N R Q G N R K T T K E G S N D L K F	34
421	CCAGAACTTCAGTCTGCCAAAAACAGGTCATGGCCTCGCATCAATAGTGCCACAGGCCA	480
35	Q N F S L P K N R S W P R I N S A T G Q	54
481	GTACCAGAGGATGAACAAGCCTCTTCTAGACTGGGAAAGAACTTTGCTGCAGTCTCTGGA	540
55	Y Q R M N K P L L D W E R N F A A V L D	74
541	TGGAGCAAAAGGCCACAGTGATGATGACTATGATGACCCTGAGCTTCGGATGGAAGAGAC	600
75	G A K G H S D D D Y D D P E L R M E E T	94
601	ATGGCAGTCGATTAAAATTTTACCAGCCCGGCCTATAAAGGAATCTGAATATGCAGATAC	660
95	W Q S I K I L P A R P I K E S E Y A D T	114
661	ACACTATTTCAAGGTTGCAATGGACACTCCCCTTCCGTTAGACACCAGGACCTCTATCTC	720
115	H Y F K V A M D T P L P L D T R T S I S	134
721	CATTGGACAGCCGACCTGGAACACACAGACGAGGTTGGAAAGAGTGGACAAACCCATTTC	780
135	I G Q P T W N T Q T R L E R V D K P I S	154
781	CAAGGACGTCAGAAGCCAAAACATTAAAGGAGATGCATCCGTAAGAAAGAACAAGATTCC	840
155	K D V R S Q N I K G D A S V R K N K I P	174
841	TTTACCACCTCCTCGGCCTCTCATAACACTTCCGAAGAAGTACCAACCCTTGCCCCCTGA	900
175	L P P P R P L I T L P K K Y Q P L P P E	194
901	GCCGGAGAGCAGCAGGCCACCTTTATCTCAGAGACACACCTTTCCAGAAGTCCAGAGAAT	960
195	P E S S R P P L S Q R H T F P E V Q R M	214
961	GCCCAGTCAGATAAGCTTAAGGGACTTAAGTGAGGTCCTTGAAGCAGAAAAAGTTCCTCA	1020
215	P S Q I S L R D L S E V L E A E K V P H	234
1021	TAACCAGAGGAAGCCTGAATCAACTCATCTGTGTAGAAAACCAAATACTCAAGAGATTCC	1080
235	N Q R K P E S T H L L E N Q N T Q E I P	254
1081	ACTTGCCATTAGCAGTTCTTCATTCACGACAAGCAACCACAGTGTGCAAAACAGAGATCA	1140
255	L A I S S S S F T T S N H S V Q N R D H	274
1141	TAGAGGAGGCATGCAGCCCTGTTCTCCTCAGAGATGCCAGCCTCCAGCCAGCTGCAGCCC	1200

09965955-092601

FIG. 3B

275	R G G M Q P C S P Q R C Q P P A S C S P	294
1201	TCACGAAAATATACTGCCCTATAAATACACAAGCTGGAGACCACCTTTCCCCAAAAGGTC	1260
295	H E N I L P Y K Y T S W R <i>P P F P</i> K R S	314
1261	TGATAGAAAGGATGTCCAGCACAATGAATGGTACATTGGAGAATACAGCCGCCAGGCAGT	1320
315	D R K D V Q H N E <u>W Y I G E Y S R Q A V</u>	334
1321	GGAAGAGGCATTTCATGAAGGAGAACAAAGGATGGTAGTTTCTTGGTCCGAGATTGTTCCAC	1380
335	<u>E E A F M K E N K D G S F L V R D C S T</u>	354
1381	AAAATCCAAGGAAGAGCCCTATGTTTTGGCTGTGTTTTATGAGAACAAAGTCTACAATGT	1440
355	<u>K S K E E P Y V L A V F Y E N K V Y N V</u>	374
1441	AAAAATCCGCTTCCTGGAGAGGAATCAGCAGTTTGCCCTGGGGACAGGACTCAGAGGAGA	1500
375	<u>K I R F L E R N Q Q F A L G T G L R G D</u>	394
1501	TGAGAAGTTTGATTTCAGTAGAAGACATCATCGAACACTACAAGAATTTTCCCATTATACT	1560
395	<u>E K F D S V E D I I E H Y K N F P I I L</u>	414
1561	AATTGATGGGAAAGATAAACTGGGGTCCACAGGAAACAGTGTACCTCACTCAGCCACT	1620
415	I D G K D K T G V H R K Q C H L T Q P L	434
1621	CCCTCTCACCAGACACCTCTTGCCTCTGTAGCCTGGTCTTTGTGTTATCTTTGGTTTACT	1680
435	P L T R H L L P L *	444
1681	GGATTTCAGCGCTTCCATTGTTTTTCATTGATTTCAAAAGTTTATTTTCTGTGCCTTCAAGG	1740
1741	GACAACTTTTTTAACTTTGGAGAAAAGAAAAACACTCTATAACAGAGAGTGGAAAATCAC	1800
1801	TCACGGTTTTTGAAAGTTCAAACCACAGAGAAAATATTTATAACATGCAAAA	1851

0966955-09304

FIG. 4A

1 GTCAGACCTCTCAGGTCTGTGGCTGCATTTACAGGAAACCAAGTCTAAAACGGACCTAT 60
61 CAGGAGGTTTTCTGCTGAAGGGCACTGCTTAGCATCGAGAAGAATTCAACCCACCGCCTT 120
121 ACTAATTTCCAGTGCCCCAAGGTCTCTGCACTGCCGCCCCCTCCTCACAGGAGACGGACAC 180
181 CTCAGCCTAGATCCCTTGGTGCTCTCCACGCTGTTTCAGGCTGAATTGAAGATCCCTCTTA 240
241 CCCGCCAGGTGCCAAGAAGTATGAACAGGCAGGGCAATAGAAAGACAAGTAAAGAAGGAT 300
301 CCAACGATTTGAAATTCAGAACTTCAGTCTGCCAAAAACAGGTCATGGCCTCGCATCA 360
361 ATAGTGCCACAGGCCAGTACCAGAGGATGAACAAGCCTCTTCTAGACTGGGAAAGAAAAT 420
421 TTGCTGCAGTCCTGGATGGAGCAAAAGGCCACAGTGATGATGACTATGATGACCCTGAGC 480
481 TTCGGATGGAAGAGACATGGCAGTCGATTAAAATTTTACCAGCCCGGCCTATAAAGGAAT 540
541 CTGAATATGCAGATACACACTATTTCAAGGTTGCAATGGACACTCCCCTTCCGTTAGACA 600
601 CCAGGACCTCTATCTCCATTGGACAGCCGACCTGGAACACACAGACGAGGTTGGAAAGAG 660
661 TGGACAAACCCATTTCCAAGGACGTCAGAAGCCAAAACATTAAAGGAGATGCATCCGTAA 720
721 GAAAGAACAAGATTCCTTTACCACCTCCTCGGCCTCTCATAACACTTCCGAAGAAGTACC 780
781 AACCCCTTGCCCCCTGAGCCGGAGAGCAGCAGGCCACCTTTATCTCAGAGACACACCTTTC 840
841 CAGAAGTCCAGAGAATGCCCAGTCAGATAAGCTTAAGGGACTTAAGTGAGGTCTTTGAAG 900
901 CAGAAAAAGTTCTCATAACCAGAGGAAGCCTGAATCAACTCATCTGTTAGAAAACCAAA 960
961 ATACTCAAGAGATTCCACTTGCCATTAGCAGTTCTTCATTACGACAAGCAACCACAGTG 1020
1021 TGCAAAACAGAGATCATAGAGGAGGCATGCAGCCCTGTTCTCCTCAGAGATGCCAGCCTC 1080
1081 CAGCCAGCTGCAGCCCTCACGAAAATATACTGCCCTATAAATACACAAGCTGGAGACCAC 1140
1141 CTTTCCCCAAAAGGTCTGATAGAAAGGATGTCCAGCACAATGAATGGTACATTGGAGAAT 1200
1201 ACAGCCGCCAGGCAGTGGAAGAGGCATTATGAAGGAGACAAGGATGGTAGTTTCTTGG 1260
1261 TCCGAGATTGTTCCACAAAATCCAAGGAAGAGCCCTATGTTTTGGCTGTGTTTTATGAGA 1320
1321 ACAAAGTCTACAATGTAAAAATCCGCTTCCTGGAGAGGAATCAGCAGTTTGCCCTGGGGA 1380
1381 CAGGACTCAGAGGAGATGAGAAGTTTGATTAGTAGAAGACATCATCGAACACTACAAGA 1440

099695-099801

FIG. 4B

1441 ATTTTCCCATTATACTAATTGATGGGAAAGATAAAACTGGGGTCCACAGGAAACAGTGTC 1500
1501 ACCTCACTCAGCCACTCCCTCTCACCAGACACCTCTTGCCTCTGTAGCCTGGTCTTTGTG 1560
1561 TTATCTTTGGTTTACTGGATTGAGCGCTTCCATTGTTTTTCATTGATTTCAAAGTTTATT 1620
1621 TTCTGTGCCTTCAAGGGACAACTTTTTTAACTTTGGAGAAAAGAAAAACA CTCTATAACA 1680
1681 GAGAGTGGAAAATCACTCACGGTTTTGAAAGTTCAAACCACAGAGAAAATATTTATAACA 1740
1741 TGCAAAAAATAAAAAACATTCTAGTAACTGGCCACTGGAAAATAAATAAAAAATAAAAACTA 1800
1801 GGGTTTTAAAAGTATCTTCTAAAAACAACAACAAAAATACTATAAACATAGCCATTAT 1860
1861 GCTCATGATACAGGCGAGCAGCAAAGGGCACCAGAAGCTGTTGCTTAAATGTTTGCAGTC 1920
1921 AGTGCAAGACAAGTCTATGGGAAATTCCCAAATCTGTGCTCTTTACAGGACACTGCGCTG 1980
1981 CCTTTATGTCAGTTGTTGGGCCTTACATATATACAATGTGTGGATGATTTCTTACACTAA 2040
2041 AGATGCTGGGCTGGGTGCGGTGCCTCATGCCTGTAATCCCAGCACTTTGGGAGGCTGAGG 2100
2101 TGGACAGATCACGAGGTCAGGAGATCAAGACCATCCTGGCTAACATGGTGAAACCCCATG 2160
2161 TCTACTAAAAATACAAAAAATCAGCTGGGCGTGGTGGTGGGTGCCTGTAGTCCCAGCTAC 2220
2221 TCGGGAGGCTGAGGCAGGAGAATGGTGTGAACCCGGGAGGCGGAGCTTGCAGTGAGCCGA 2280
2281 AATCGCGCCACTGCACTCCAATCCAGCCTGGGGACAGAGAGACTCCGTCTCAAAA 2335

FIG. 5

1							M	N	R	Q	G	N	R	K	T	T	K	E	G	S	14
15	N	D	L	K	F	Q	N	F	S	L	P	K	N	R	S	W	P	R	I	N	34
35	S	A	T	G	Q	Y	Q	R	M	N	K	P	L	L	D	W	E	R	N	F	54
55	A	A	V	L	D	G	A	K	G	H	S	D	D	D	Y	D	D	P	E	L	74
75	R	M	E	E	T	W	Q	S	I	K	I	L	P	A	R	P	I	K	E	S	94
95	E	Y	A	D	T	H	Y	F	K	V	A	M	D	T	P	L	P	L	D	T	114
115	R	T	S	I	S	I	G	Q	P	T	W	N	T	Q	T	R	L	E	R	V	134
135	D	K	P	I	S	K	D	V	R	S	Q	N	I	K	G	D	A	S	V	R	154
155	K	N	K	I	P	L	P	P	P	R	P	L	I	T	L	P	K	K	Y	Q	174
175	P	L	P	P	E	P	E	S	S	R	P	P	L	S	Q	R	H	T	F	P	194
195	E	V	Q	R	M	P	S	Q	I	S	L	R	D	L	S	E	V	L	E	A	214
215	E	K	V	P	H	N	Q	R	K	P	E	S	T	H	L	L	E	N	Q	N	234
235	T	Q	E	I	P	L	A	I	S	S	S	S	F	T	T	S	N	H	S	V	254
255	Q	N	R	D	H	R	G	G	M	Q	P	C	S	P	Q	R	C	Q	P	P	274
275	A	S	C	S	P	H	E	N	I	L	P	Y	K	Y	T	S	W	R	P	P	294
295	F	P	K	R	S	D	R	K	D	V	Q	H	N	E	W	Y	I	G	E	Y	314
315	S	R	Q	A	V	E	E	A	F	M	K	E	N	K	D	G	S	F	L	V	334
335	R	D	C	S	T	K	S	K	E	E	P	Y	V	L	A	V	F	Y	E	N	354
355	K	V	Y	N	V	K	I	R	F	L	E	R	N	Q	Q	F	A	L	G	T	374
375	G	L	R	G	D	E	K	F	D	S	V	E	D	I	I	E	H	Y	K	N	394
395	F	P	I	I	L	I	D	G	K	D	K	T	G	V	H	R	K	Q	C	H	414
415	L	T	Q	P	L	P	L	T	R	H	L	L	P	L							428

FIG. 6A

1	GTCAGACCTCTCAGGTCTGTGGCTGCATTTTCACAGGAAACCAAGTCTAAAACGGACCTAT	60
61	CAGGAGGTTTTCTGCTGAAGGGCACTGCTTAGCATCGAGAAGAATTCAACCCACCGCCTT	120
121	ACTAATTTCCAGTGCCCCAAGGTCTCTGCACTGCCGCCCCCTCCTCACAGGAGACGGACAC	180
181	CTCAGCCTAGATCCCTTGGTGCTCTCCACGCTGTTTCAGGCTGAATTGAAGATCCCTCTTA	240
241	CCCGCCAGGTGCCAAGAAGTATGAACAGGCAGGGCAATAGAAAGACAAGTAAAGAAGGAT	300
1	M N R Q G N R K T T K E G S	14
301	CCAACGATTTGAAATTCCAGAAGTTCAGTCTGCCAAAAACAGGTCATGGCCTCGCATCA	360
15	N D L K F Q N F S L P K N R S W P R I N	34
361	ATAGTGCCACAGGCCAGTACCAGAGGATGAACAAGCCTCTTCTAGACTGGGAAAGAACT	420
35	S A T G Q Y Q R M N K P L L D W E R N F	54
421	TTGCTGCAGTCCTGGATGGAGCAAAAGGCCACAGTGATGATGACTATGATGACCCTGAGC	480
55	A A V L D G A K G H S D D D Y D D P E L	74
481	TTCGGATGGAAGAGACATGGCAGTCGATTAATAATTTTACCAGCCCGGCCTATAAAGGAAT	540
75	R M E E T W Q S I K I L P A R P I K E S	94
541	CTGAATATGCAGATACACACTATTTCAAGGTTGCAATGGACACTCCCCTTCCGTTAGACA	600
95	E Y A D T H Y F K V A M D T P L P L D T	114
601	CCAGGACCTCTATCTCCATTGGACAGCCGACCTGGAACACACAGACGAGGTTGGAAAGAG	660
115	R T S I S I G Q P T W N T Q T R L E R V	134
661	TGGACAAACCCATTTCCAAGGACGTGAGAAGCCAAACATTAAAGGAGATGCATCCGTAA	720
135	D K P I S K D V R S Q N I K G D A S V R	154
721	GAAAGAACAAGATTCCCTTTACCACCTCCTCGGCCTCTCATAAACTTCCGAAGAAGTACC	780
155	K N K I P L P P P R P L I T L P K K Y Q	174
781	AACCCCTTGCCCCCTGAGCCGGAGAGCAGCAGGCCACCTTTATCTCAGAGACACACCTTTC	840
175	P L P P E P E S S R P P L S Q R H T F P	194
841	CAGAAGTCCAGAGAATGCCAGTCAGATAAGCTTAAGGGACTTAAGTGAGGTCCTTGAAG	900
195	E V Q R M P S Q I S L R D L S E V L E A	214
901	CAGAAAAAGTTCCTCATAACCAGAGGAAGCCTGAATCAACTCATCTGTTAGAAAACCAA	960
215	E K V P H N Q R K P E S T H L L E N Q N	234
961	ATACTCAAGAGATTCCACTTGCCATTAGCAGTTCTTCATTACGACAAGCAACCACAGTG	1020
235	T Q E I P L A I S S S S F T T S N H S V	254
1021	TGCAAAACAGAGATCATAGAGGAGGCATGCAGCCCTGTTCTCCTCAGAGATGCCAGCCTC	1080
255	Q N R D H R G G M Q P C S P Q R C Q P P	274
1081	CAGCCAGCTGCAGCCCTCACGAAAATATACTGCCCTATAAATACACAAGCTGGAGACCAC	1140
275	A S C S P H E N I L P Y K Y T S W R P P	294

T09260" 5569660

FIG. 6B

1141	CTTTCCCCAAAAGGTCTGATAGAAAGGATGTCCAGCACAATGAATGGTACATTGGAGAAT	1200
295	F P K R S D R K D V Q H N E W Y I G E Y	314
1201	ACAGCCGCCAGGCAGTGGAAGAGGCATTCATGAAGGAGAACAAAGGATGGTAGTTTCTTGG	1260
315	S R Q A V E E A F M K E N K D G S F L V	334
1261	TCCGAGATTGTTCCACAAAATCCAAGGAAGAGCCCTATGTTTTGGCTGTGTTTTATGAGA	1320
335	R D C S T K S K E E P Y V L A V F Y E N	354
1321	ACAAAGTCTACAATGTAAAAATCCGCTTCCTGGAGAGGAATCAGCAGTTTGCCCTGGGGA	1380
355	K V Y N V K I R F L E R N Q Q F A L G T	374
1381	CAGGACTCAGAGGAGATGAGAAGTTTGATTCACTAGAAAGACATCATCGAACACTACAAGA	1440
375	G L R G D E K F D S V E D I I E H Y K N	394
1441	ATTTTCCCATTATACTAATTGATGGGAAAGATAAACTGGGGTCCACAGGAAACAGTGTC	1500
395	F P I I L I D G K D K T G V H R K Q C H	414
1501	ACCTCACTCAGCCACTCCCTCTCACCAGACACCTCTGCCTCTGTAGCCTGGTCTTTGTG	1560
415	L T Q P L P L T R H L L P L	429
1561	TTATCTTTGGTTTACTGGATTTCAGCGCTTCCATTGTTTTCATTGATTTCAAAAAGTTTATT	1620
1621	TTCTGTGCCTTCAAGGGACAACTTTTTTAACTTTGGAGAAAAGAAAAACACTCTATAACA	1680
1681	GAGAGTGGAATCACTCACGGTTTTTGAAAGTTCAAACCACAGAGAAAATATTTATAACA	1740
1741	TGCAAAAAATAAAAAACATTCTAGTAACTGGCCACTGGAAAATAAATAAAAAATAAACTA	1800
1801	GGGTTTTAAAGTATCTTCTAAAAACAACAACAAAAATACTATAAACATAGCCATTAT	1860
1861	GCTCATGATACAGGCGAGCAGCAAAGGGCACCAGAAGCTGTTGCTTAAATGTTTGCAGTC	1920
1921	AGTGCAAGACAAGTCTATGGGAAATTCCTCAATCTGTGCTCTTTACAGGACACTGCGCTG	1980
1981	CCTTTATGTCAGTTGTTGGGCCTTACATATATACAATGTGTGGATGATTTCTTACACTAA	2040
2041	AGATGCTGGGCTGGGTGCGGTGCCTCATGCCTGTAATCCCAGCACTTTGGGAGGCTGAGG	2100
2101	TGGACAGATCACGAGGTCAGGAGATCAAGACCATCCTGGCTAACATGGTGAAACCCCATG	2160
2161	TCTACTAAAAATACAAAAAATCAGCTGGGCGTGGTGGTGGGTGCCTGTAGTCCCAGCTAC	2220
2221	TCGGGAGGCTGAGGCAGGAGAATGGTGTGAACCCGGGAGGCGGAGCTTGCAGTGAGCCGA	2280
2281	AATCGCGCCACTGCACTCCAATCCAGCCTGGGGACAGAGAGACTCCGTCTCAAAA	2335

09969955 "09969955"

FIG. 7A

1	GGCTGCTGTTAACAACCTTCATGTCCCCGTGGGTAGCAGGCAGGTGCTTCTGTCTGATCTG	60
61	GCTCTCCTTGACCACTGTACTCATCAAATAGACCAAGATCCCCAGAGTCCAAGATCCTTA	120
121	CAAGGGGGCCAGAAAGGGATGAGCTTTCTGAAGAAGCACTGATGTAAAATACCAGGAATT	180
181	TTGACATCGAAGAAGATTTTTGTGATGGCAGCTGGGATTTGGCCATAATCTAGAAGACAC	240
241	ATGGTGAATACAGTTGCAAGTCATTTAGTCATATTTCTTGCTAAATTGCTGTGTCTTCAA	300
301	TGGGGCAATAGAAAGACAACCTAAAGAAGGATCCAACGATTTGAAATTCCAGAACTTCAGT	360
361	CTGCCAAAAAACAGGTCATGGCCTCGCATCAATAGTGCCACAGGCCAGTACCAGAGGATG	420
421	AACAAGCCTCTTCTAGACTGGATTTGGCAGCTTGACCATTTATTATCGCACAGTGGATGC	480
481	AATCAGAAGTCTGGGCACAGCATGGCTCAACTAGTTCCCCTGTTCTGGGTCTCACAAGAC	540
541	TGAAAGCAACATGCTGGCAGGGCTGCATTCTCCTCCAGGGGCTCTGAAGAGGAACTTGCT	600
601	TCCAGATTCTTTCAGGAAAGAACTTTGCTGCAGTCCTGGATGGAGCAAAGGCCACAGT	660
661	GATGATGACTATGATGACCCTGAGCTTCGGATGGAAGAGACATGGCAGTCGATTAAAATT	720
721	TTACCAGCCCGGCCTATAAAGGAATCTGAATATGCAGATACACACTATTTCAAGGTTGCA	780
781	ATGGACACTCCCCTTCCGTTAGACACCAGGACCTCTATCTCCATTGGACAGCCGACCTGG	840
841	AACACACAGACGAGGTTGGAAAGAGTGGACAAACCCATTTCCAAGGACGTGAGAAGCCAA	900
901	AACATTAAAGGAGATGCATCCGTAAGAAAGAACAAGATTCTTTTACCACCTCCTCGGCCT	960
961	CTCATAACACTTCCGAAGAAGTACCAACCCCTGCCCCCTGAGCCGGAGAGCAGCAGGCCA	1020
1021	CCTTTATCTCAGAGACACACCTTTCCAGAAGTCCAGAGAATGCCAGTCAGATAAGCTTA	1080
1081	AGGGACTTAAGTGAGGTCCTTGAAGCAGAAAAAGTTCTTCATAACCAGAGGAAGCCTGAA	1140
1141	TCAACTCATCTGTTAGAAAACCAAAATACTCAAGAGATTCCACTTGCCATTAGCAGTTCT	1200
1201	TCATTACGACAAGCAACCACAGTGTGCAAAACAGAGATCATAGAGGAGGCATGCAGCCC	1260
1261	TGTTCTCCTCAGAGATGCCAGCCTCCAGCCAGCTGCAGCCCTCACGAAAAATATACTGCCC	1320
1321	TATAAATACACAAGCTGGAGACCACCTTTCCCCAAAAGGTCTGATAGAAAGGATGTCCAG	1380
1381	CACAATGAATGGTACATTGGAGAATACAGCCGCCAGGCAGTGGAAGAGGCATTTCATGAAG	1440

FIG. 9A

1	GGCTGCTGTTAACAACCTTCATGTCCCCGTGGGTAGCAGGCAGGTGCTTCTGTCTGATCTG	60
61	GCTCTCCTTGACCACTGTACTCATCAAATAGACCAAGATCCCCAGAGTCCAAGATCCTTA	120
121	CAAGGGGGCCAGAAAGGGATGAGCTTTCTGAAGAAGCACTGATGTAAAATACCAGGAATT	180
181	TTGACATCGAAGAAGATTTTGTGATGGCAGCTGGGATTTGGCCATAATCTAGAAGACAC	240
241	ATGGTGAATACAGTTGCAAGTCATTTAGTCATATTTCTTGCTAAATTGCTGTCTCTTCAA	300
301	TGGGGCAATAGAAAAGACAACATAAGAAGGATCCAACGATTTGAAATTCCAGAACTTCAGT	360
361	CTGCCAAAAACAGGTCATGGCCTCGCATCAATAGTGCCACAGGCCAGTACCAGAGGATG	420
421	AACAAGCCTCTTCTAGACTGGATTGGCAGCTTGACCATTTATTATCGCACAGTGGATGC	480
481	AATCAGAAGTCTGGGCACAGCATGGCTCAACTAGTTCCCCTGTTCTGGGTCTCACAAGAC	540
541	TGAAAGCAACATGCTGGCAGGGCTGCATTCTCCTCCAGGGGCTCTGAAGAGGAACCTGCT	600
601	TCCAGATTCTTTCAGGAAAGAACTTTGCTGCAGTCCTGGATGGAGCAAAGGCCACAGT	660
661	GATGATGACTATGATGACCCTGAGCTTCGGATGGAAGAGACATGGCAGTCGATTAAATT	720
1	M E E T W Q S I K I	10
721	TTACCAGCCCGGCCTATAAAGGAATCTGAATATGCAGATACACACTATTTCAAGGTTGCA	780
11	L P A R P I K E S E Y A D T H Y F K V A	30
781	ATGGACACTCCCCTTCCGTTAGACACCAGGACCTCTATCTCCATTGGACAGCCGACCTGG	840
31	M D T P L P L D T R T S I S I G Q P T W	50
841	AACACACAGACGAGGTTGGAAAGAGTGGACAAACCCATTTCGAAGGACGTCAGAAGCCAA	900
51	N T Q T R L E R V D K P I S K D V R S Q	70
901	AACATTAAAGGAGATGCATCCGTAAGAAAGAACAAGATTCCTTTACCACCTCCTCGGCCT	960
71	N I K G D A S V R K N K I P L P P P R P	90
961	CTCATAACACTTCCGAAGAAGTACCAACCCCTTGCCCCCTGAGCCGGAGAGCAGCAGGCCA	1020
91	L I T L P K K Y Q P L P P E P E S S R P	110
1021	CCTTTATCTCAGAGACACACCTTTCCAGAAGTCCAGAGAATGCCAGTCAGATAAGCTTA	1080
111	P L S Q R H T F P E V Q R M P S Q I S L	130
1081	AGGGACTTAAGTGAGGTCTTGAAGCAGAAAAAGTTCCTCATAACCAGAGGAAGCCTGAA	1140
131	R D L S E V L E A E K V P H N Q R K P E	150
1141	TCAACTCATCTGTTAGAAAACCAAATACTCAAGAGATTCCACTTGCCATTAGCAGTTCT	1200
151	S T H L L E N Q N T Q E I P L A I S S S	170
1201	TCATTACGACAAGCAACCACAGTGTGCAAAACAGAGATCATAGAGGAGGCATGCAGCCC	1260
171	S F T T S N H S V Q N R D H R G G M Q P	190
1261	TGTTCTCCTCAGAGATGCCAGCCTCCAGCCAGCTGCAGCCCTCACGAAAATACTGCCC	1320

0996955-09201

FIG. 9B

191	C S P Q R C Q P P A S C S P H E N I L P	210
1321	TATAAATACACAAGCTGGAGACCACCTTTCCCCAAAAGGTCTGATAGAAAGGATGTCCAG	1380
211	Y K Y T S W R P P F P K R S D R K D V Q	230
1381	CACAATGAATGGTACATTGGAGAATACAGCCGCCAGGCAGTGGAAGAGGCATTTCATGAAG	1440
231	H N E W Y I G E Y S R Q A V E E A F M K	250
1441	GAGAACAAGGATGGTAGTTTCTTGGTCCGAGATTGTTCCACAAAATCCAAGGAAGAGCCC	1500
251	E N K D G S F L V R D C S T K S K E E P	270
1501	TATGTTTTGGCTGTGTTTTATGAGAACAAAGTCTACAATGTAAAAATCCGCTTCCTGGAG	1560
271	Y V L A V F Y E N K V Y N V K I R F L E	290
1561	AGGAATCAGCAGTTTGCCCTGGGGACAGGACTCAGAGGAGATGAGAAGTTTGATTTCAGTA	1620
291	R N Q Q F A L G T G L R G D E K F D S V	310
1621	GAAGACATCATCGAACACTACAAGAATTTTCCATTATACTAATTGATGGGAAAGATAAA	1680
311	E D I I E H Y K N F P I I L I D G K D K	330
1681	ACTGGGGTCCACAGGAAACAGTGTACCTCACTCAGCCACTCCCTCTCACCAGACACCTC	1740
331	T G V H R K Q C H L T Q P L P L T R H L	350
1741	TTGCCTCTGTAGCCTGGTCTTTGTGTTATCTTTGGTTTACTGGATTTCAGCGCTTCCATTG	1800
351	L P L *	354
1801	TTTTTCATTGATTTCAAAAGTTTATTTTCTGTGCCTTCAAGGGACAACCTTTTTTAACTTTG	1860
1861	GAGAAAAGAAAAACACTCTATAACAGAGAGTGGAAAATCACTCACGGTTTTTGAAAGTTCA	1920
1921	AACCACAGAGAAAATATTTATAACATGCAAAAAATAAAAAACATTCTAGTAACTGGCCACT	1980
1981	GGAAAATAAATAAAAAATAAAAACTAGGGTTTTTAAAAGTATCTTCTAAAAAACAACAACAA	2040
2041	AAAATACTATAAACATAGCCATTATGCTCATGATACAGGCGAGCAGCAAAGGGCACCAGA	2100
2101	AGCTGTTGCTTAAATGTTTGCAGTCAGTGCAAGACAAGTCTATGGGAAATTCCCCAAATCT	2160
2161	GTGCTCTTTACAGGACACTGCGCTGCCTTTATGTTCAGTTGTTGGGCCTTACATATATACA	2220
2221	ATGTGTGGATGATTTCTTACACTAAAGATGCTGGGCTGGGTGCGGTGCCTCATGCCTGTA	2280
2281	ATCCCAGCACTTTGGGAGGCTGAGGTGGACAGATCACGAGGTGAGGAGATCAAGACCATC	2340
2341	CTGGCTAACATGGTGAAACCCCATGTCTACTAAAAATACAAAAAATCAGCTGGGCGTGGT	2400
2401	GGTGGGTGCCTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATGGTGTGAACCCG	2460
2461	GGAGGCGGAGCTTGTCAGTGAGCCGAAATCGCGCCACTGCACTCCAATCCAGCCTGGGGAC	2520
2521	AGAGAGACTCCGTCTCAAAA	2540

0996655-0996660

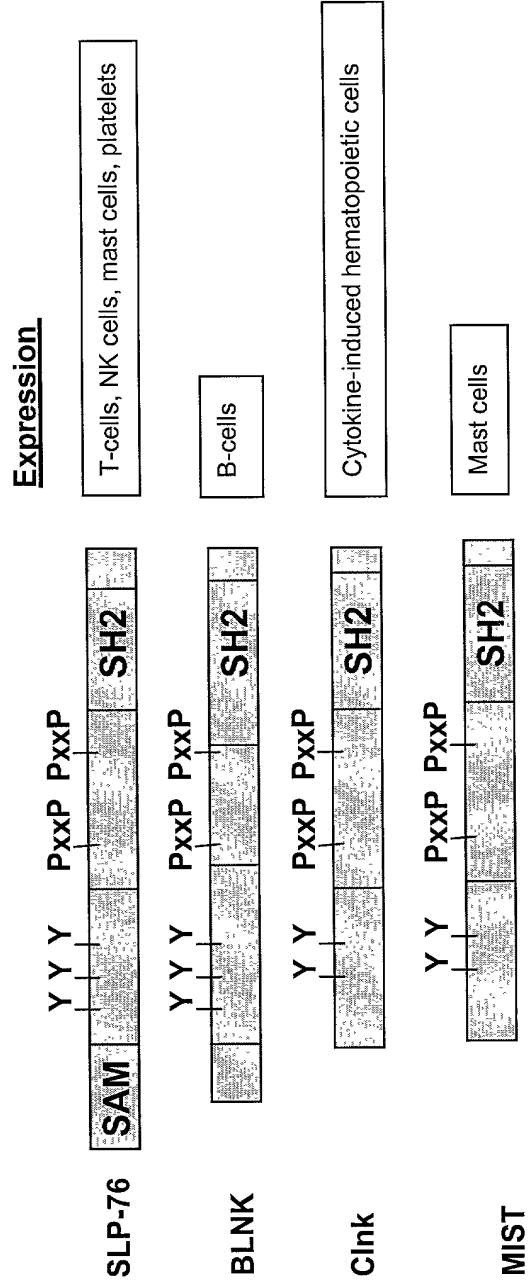
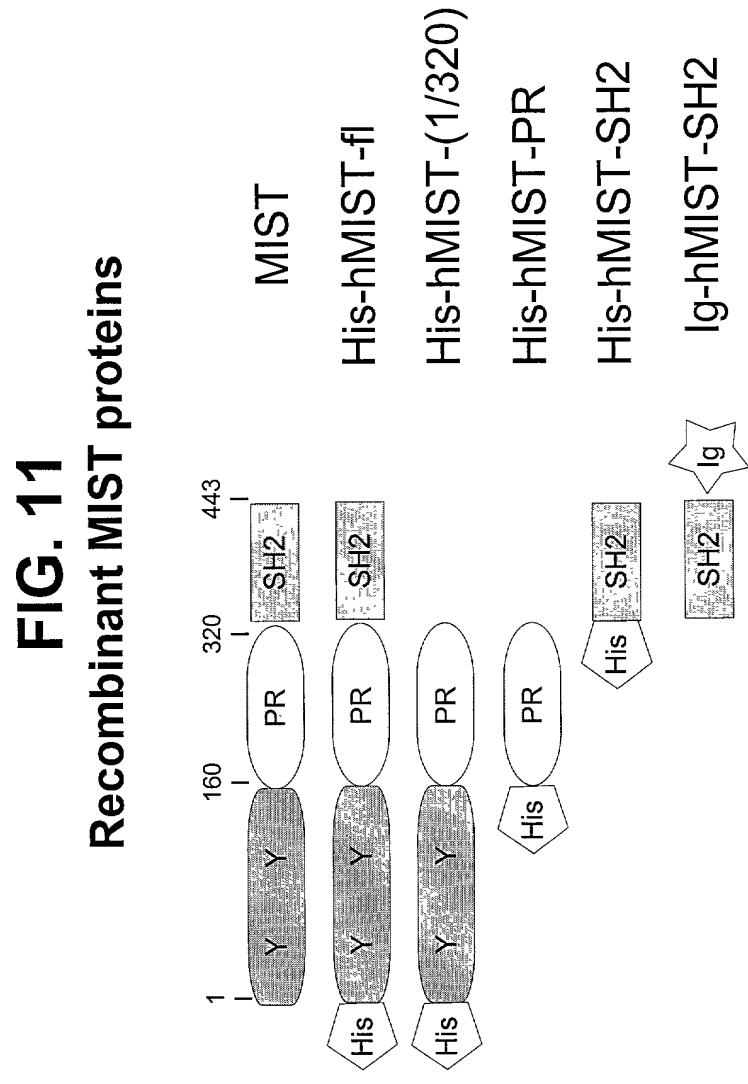


FIG. 10



	Mean	SD	Median	Mode	Range	Skewness	Kurtosis	Shapiro-Wilk's W	P
Age	60.78	9.02	60	60	45-75	-0.05	0.00	0.99	.99
Gender	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Marital status	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Education	12.00	1.00	12	12	10-14	0.00	0.00	0.99	.99
Income	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Health status	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Depression	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Anxiety	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Stress	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Social support	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Life satisfaction	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Quality of life	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Resilience	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Coping strategies	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Mental health	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Physical health	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99
Overall well-being	1.00	0.00	1	1	1-1	0.00	0.00	0.99	.99

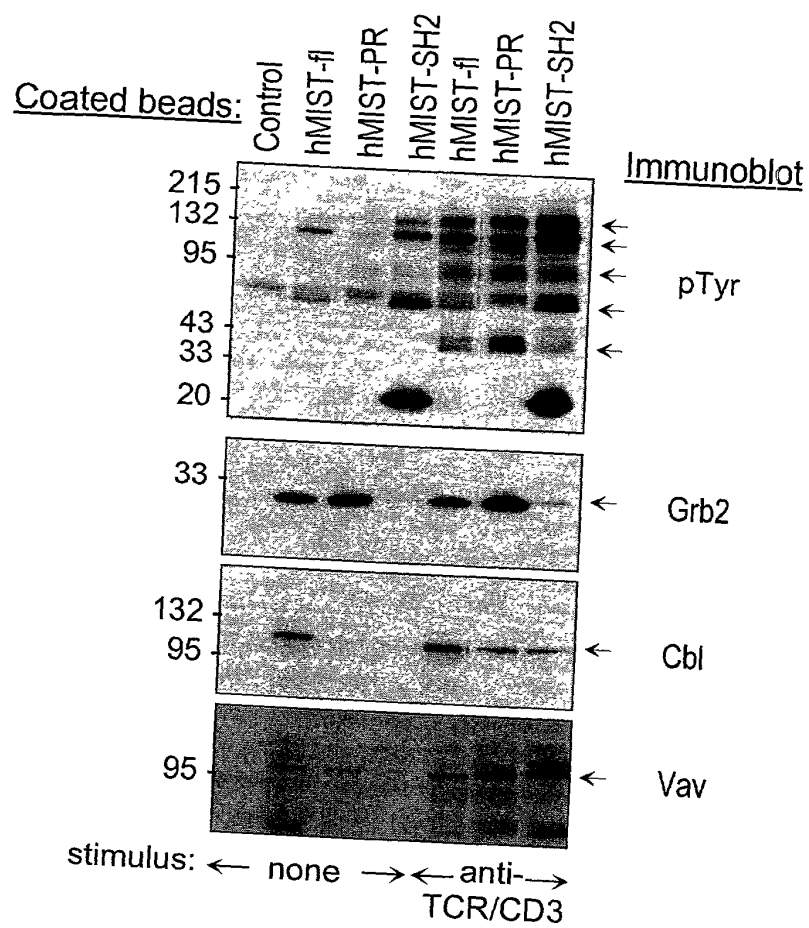
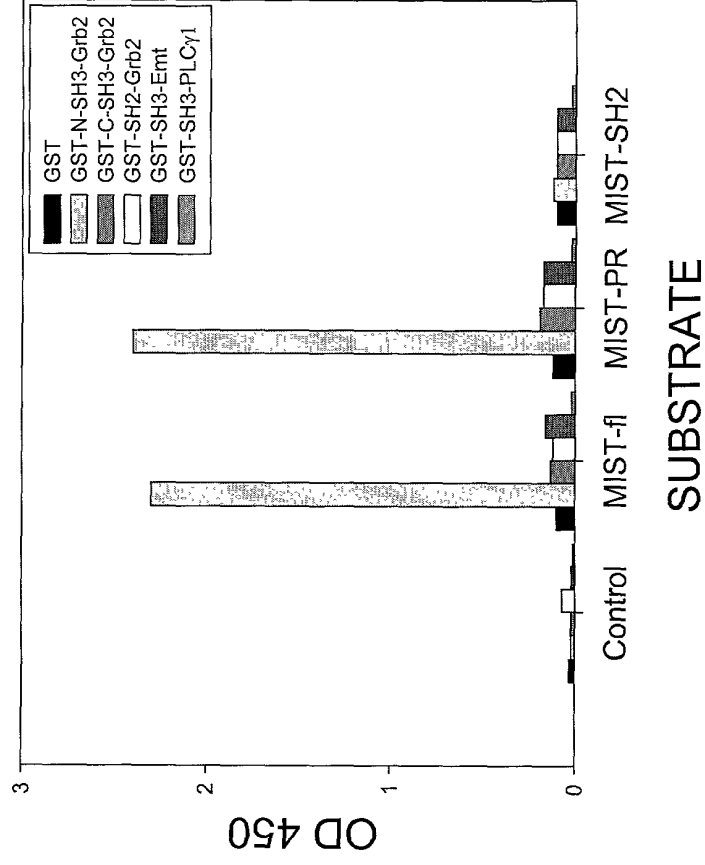


FIG. 13
Interaction between hMIST and Grb2-SH3 domain



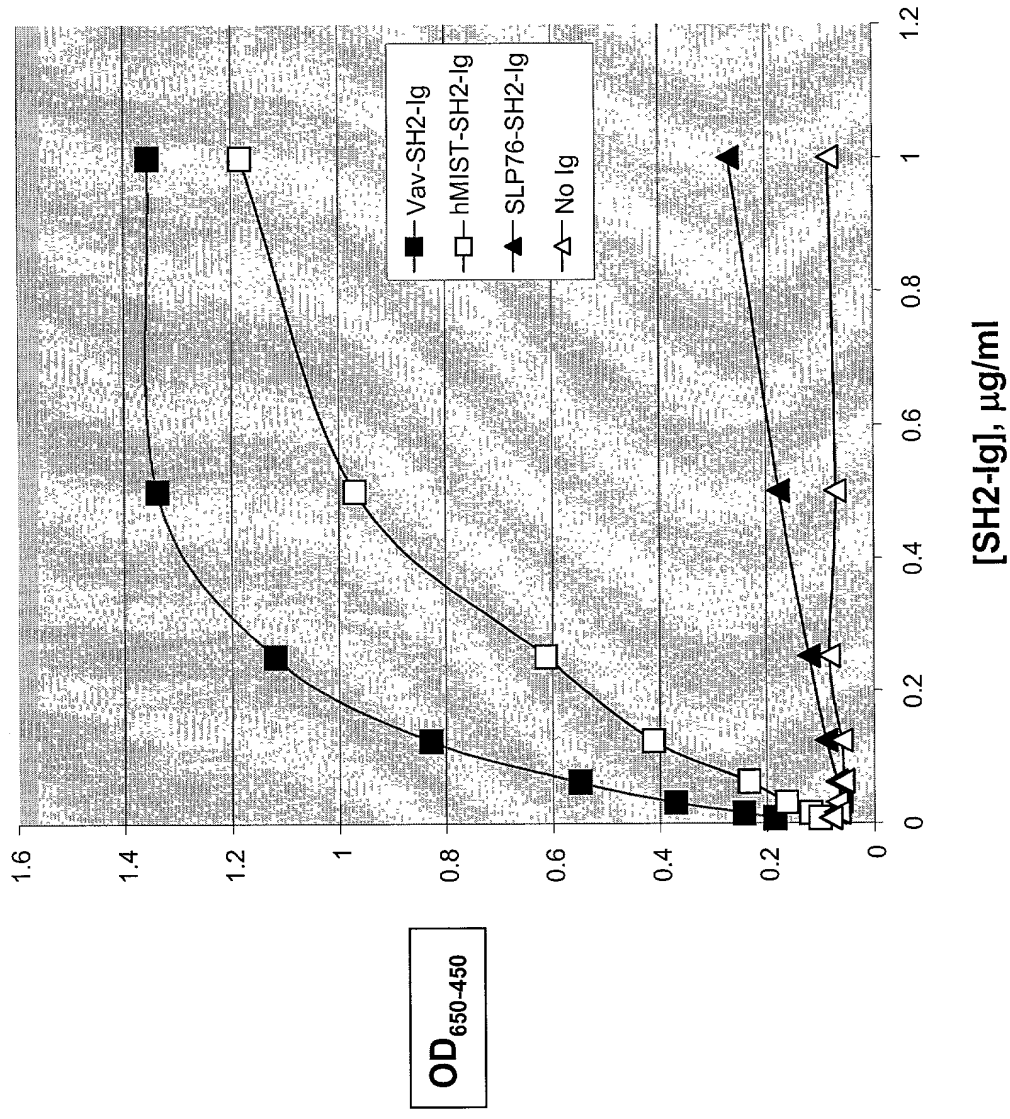


FIG. 14



FIG. 15A

